DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-000523 Address: 333 Burma Road **Date Inspected:** 26-Sep-2007

City: Oakland, CA 94607

OSM Arrival Time: 2330 **Project Name:** SAS Superstructure **OSM Departure Time:** 800 Prime Contractor: American Bridge/Fluor Enterprises, a JV

Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Contractor: Location:** Shanghai, China

CWI Name: CWI Present: Yes Xu Lefeng & Li Gang No **Inspected CWI report:** Yes **Rod Oven in Use:** Yes No N/A No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Oualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A **Approved Drawings:** Yes No N/A **Approved WPS:** Yes No **Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** Caltrans Mockup

Summary of Items Observed:

Summary Items Observed: Caltrans Quality Assurance (QA) Inspector, Mike Hasler was present to observe the fitup, welding and related activities associated with the fabricating of Caltrans Mock-up, 77M, 89M and 114M, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

Item Description WBS Dwg No. **Status** Internal Connection Plate NA NA Work In Progress

Mock-Up 114M, CD Corner Internal Connection Plate: Caltrans QA Inspector observed flux cored arc welding (FCAW) in progress at stiffener plate, p858 to A119-1 and p927 to A119-1, complete joint penetration (CJP), double bevel Butt-joint welds. The weld numbers are identified as weld 1 and 2. The welders were observed welding fill/cover pass weld in the flat position. Caltrans QA Inspector observed welders chipping and wire brushing during the interpass weld cleaning. The welders are identified as Mr. Cao Henjin, welder stamp 66420 and Mr. Wen Yanyan, welder stamp 066734. The welders were using welding procedure specification WPS-B-T-2232-TC-U5-F, Revision 1. Caltrans QA Inspector observed ZPMC Quality Control (QC) Certified Welding Inspector (CWI) Mr. Xu Lefeng and Bureau Veritas inspector, Mr. Li Gang monitoring welding activities at the workstation. Caltrans QA Inspector measured current welding parameters at approximately 325 amps, 32.0 volts and 305 millimeters per minute (mm/min) travel speed. Preheat and interpass temperatures were verified during welding activities. The preheat temperature prior to the start of welding measures more than 110 Celsius (230 degree Fahrenheit) but less than 232 Celsius (450 degrees Fahrenheit) during maximum interpass temperature verification. FCAW consumable is verified and identified as Supercored 71H, classification E71T-1, diameter 1.4 mm (.055 inches).

WELDING INSPECTION REPORT

(Continued Page 2 of 2)



Summary of Conversations:

As identified within the contents of this report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Hasler,Mike	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer